

### **THE CLAIMS**

1. (Previously Presented) A method for decision analysis and resolution, wherein an event is associated with a root cause, the method comprising the steps of:
  - relating a solution to the event based on the root cause;
  - determining whether the solution can resolve the event automatically;
  - automatically resolving the event when the event can be resolved automatically; and
  - providing information for resolving the event to a user when the event cannot be resolved automatically.
2. (Original) The method of claim 1, wherein the step of relating a solution to a root cause includes utilizing a solutions catalog.
3. (Original) The method of claim 1, wherein the step of relating a solution to a root cause includes chaining a series of solution objects to the root cause.
4. (Original) The method of claim 1, wherein the step of relating a solution to a root cause includes interoperating with a trouble ticket system.
5. (Original) The method of claim 1, wherein the events are related to object oriented constructs, wherein the object oriented constructs include underlying intelligence, wherein the intelligence includes relationships between the underlying object oriented constructs, wherein the step of determining whether the solution can resolve the event automatically utilizes the intelligence and the relationships to evaluate the validity of the solution.
6. (Original) The method of claim 5, wherein the validity of the solution is based upon previous success in resolving the event and descriptions of the related root cause.
7. (Cancelled).

8. (Original) The method of claim 1, wherein the step of determining whether the solution can resolve the event automatically includes determining whether a root cause has a statistically significant correlation with a defined set of tasks leading to a resolution of the event.

9. (Original) The method of claim 1, wherein the step of determining whether the solution can resolve the event automatically includes using object-oriented constructs.

10. (Original) The method of claim 1, wherein the step of determining whether the solution can resolve the event automatically includes allowing a user to prevent automated resolution.

11. (Original) The method of claim 1, wherein the step of automatically resolving the event includes providing information to a user by updating a trouble ticket.

12. (Original) The method of claim 1, wherein the step of providing information for resolving the event to a user includes presenting the user with suggested corrective actions.

13. (Original) The method of claim 1, wherein the step of providing information for resolving the event to a user includes evaluating the strength of relationships between a root cause construct and a resolution construct.

14. (Original) The method of claim 1, wherein the step of providing information for resolving the event to a user includes utilizing an object oriented model to define object constructs, wherein the constructs are then presented to the user.

15. (Original) The method of claim 1, wherein the step of providing information for resolving the event to a user includes a visualization of the information for resolving the event.

16. (Original) The method of claim 1, wherein the step of providing information for resolving the event to a user includes a visualization of the information for resolving the event, wherein the visualization includes providing an overlay, wherein the overlay offers information about the event.

17. (Original) The method of claim 1, wherein the step of providing information for resolving the event to a user includes providing a searchable knowledge base.

18. (Original) The method of claim 1, wherein the step of providing information for resolving the event to a user includes presenting a probability, wherein the probability is indicative of the success of the solution.

19. (Original) The method of claim 1, wherein the method is practiced in a network, further including the step of revising the network based on data generated while resolving the event.

20. (Original) The method of claim 19, wherein the step of revising the network includes revising a datastore within the network based on the event resolution.

21. (Original) The method of claim 1, wherein the method is practiced in a network, further including the step of distributing solutions in the network.

22. (Original) The method of claim 1, wherein the method is practiced in a network, further including the step of creating heuristics related to the solution, wherein the heuristics are configured to be available within the network to evaluate proposed solutions.

23. (Original) The method of claim 1, wherein the event is associated with a security fault.

24. (Original) The method of claim 1, wherein the event is associated with a network operational fault.

25. (Previously Presented) A network system configured to resolve network problem events correlated to root causes in an object-oriented environment, comprising:

a resolution module configured to generate a proposed response to the detected event;  
and

a solution module configured to resolve the detected event using the proposed response,

wherein the resolution module is configured to cooperate with the solution module to automatically implement the proposed response, and

wherein the resolution module is configured to cooperate with the solution module to present the proposed response as a suggested response to resolve the detected event.

26. (Original) The system of claim 25, further including a user input module configured to allow a network user to initiate implementation of the proposed response.

27. (Original) The system of claim 25, wherein the resolution module further includes a heuristics module configured to track proposed responses to detected events.

28. (Original) The system of claim 27, wherein the heuristics module is configured to correlate proposed responses to successful and unsuccessful resolutions of detected events.

29. (Original) The system of claim 28, wherein the heuristics module is configured to solicit new responses to detected events based upon previous successful resolutions of similar detected events.

30. (Original) The system of claim 28, wherein the heuristics module is configured to present suggested responses to detected events based upon previous successful resolutions of similar detected events.

31. (Original) The system of claim 27, wherein the heuristics module is configured to generate automated responses to detected events based upon previous successful resolutions of similar previously selected responses.

32. (Original) The system of claim 31, wherein the heuristics module is configured to generate the automated responses based upon a predetermined success threshold for previously detected events.

33. (Original) The system of claim 32, wherein the heuristics module is configured to generate automated responses based upon previous optional responses once a success threshold for the previous optional responses has been reached.

34. (Previously Presented) A computer-readable medium having stored thereon a sequence of instructions for decision analysis and resolution of an event associated with a root cause, the instructions, when executed by a computing device, cause the computing device to perform a method comprising the steps of:

relating a solution to the event based on the root cause;

determining whether the solution can resolve the event automatically;

automatically resolving the event when the event can be resolved automatically; and

providing information for resolving the event to a user when the event cannot be resolved automatically.

35. (Previously Presented) The computer-readable medium of claim 34, wherein the instructions for relating a solution to a root cause comprise instructions for utilizing a solutions catalog.

36. (Previously Presented) The computer-readable medium of claim 34, wherein the instructions for relating a solution to a root cause comprise instructions for chaining a series of solution objects to the root cause.

37. (Previously Presented) The computer-readable medium of claim 34, wherein the instructions for relating a solution to a root cause comprise instructions for interoperating with a trouble ticket system.

38. (Previously Presented) The computer-readable medium of claim 34, wherein the events are related to object oriented constructs, wherein the object oriented constructs include underlying intelligence, and wherein the intelligence includes relationships between the underlying object oriented constructs, the computer readable medium further comprising instructions which cause the computing device to perform the steps of:

determining whether the solution can resolve the event automatically; and  
utilizing the intelligence and the relationships to evaluate the validity of the solution.

39. (Previously Presented) The computer-readable medium of claim 38, wherein the validity of the solution is based upon previous success in resolving the event and descriptions of the related root cause.

40. (Cancelled).

41. (Previously Presented) The computer-readable medium of claim 34, wherein the instructions for determining whether the solution can resolve the event automatically comprise instructions for determining whether a root cause has a statistically significant correlation with a defined set of tasks leading to a resolution of the event.

42. (Previously Presented) The computer-readable medium of claim 34, wherein the instructions for determining whether the solution can resolve the event automatically comprise instructions for using object-oriented constructs.

43. (Previously Presented) The computer-readable medium of claim 34, wherein the instructions for determining whether the solution can resolve the event automatically comprise instructions for allowing a user to prevent automated resolution.

44. (Previously Presented) The computer-readable medium of claim 34, wherein the instructions for automatically resolving the event comprise instructions for providing information to a user by updating a trouble ticket.

45. (Previously Presented) The computer-readable medium of claim 34, wherein the instructions for providing information for resolving the event to a user comprise instructions for presenting the user with suggested corrective actions.

46. (Previously Presented) The computer-readable medium of claim 34, wherein the instructions for providing information for resolving the event to a user comprise instructions for evaluating the strength of relationships between a root cause constructs and a resolution construct.

47. (Previously Presented) The computer-readable medium of claim 34, wherein the instructions for providing information for resolving the event to a user includes utilizing an object oriented model to define object constructs, wherein the constructs are then presented to the user.

48. (Previously Presented) The computer-readable medium of claim 34, wherein the instructions for providing information for resolving the event to a user comprise instructions for a visualization of the information for resolving the event.

49. (Previously Presented) The computer-readable medium of claim 34, wherein the instructions for providing information for resolving the event to a user comprise instructions for visualizing the information for resolving the event, wherein visualizing comprises providing an overlay, wherein the overlay offers information about the event.

50. (Previously Presented) The computer-readable medium of claim 34, wherein the instructions for providing information for resolving the event to a user comprise instructions for providing a searchable knowledge base.

51. (Previously Presented) The computer-readable medium of claim 34, wherein the instructions for providing information for resolving the event to a user comprise instructions for presenting a probability, wherein the probability is indicative of the success of the solution.

52. (Previously Presented) The computer-readable medium of claim 34, wherein the computer readable medium resides in a network, further comprising instructions for revising the network based on data generated while resolving the event.

53. (Previously Presented) The computer-readable medium of claim 52, wherein the instructions for revising the network comprise instructions for revising a datastore within the network based on the event resolution.

54. (Previously Presented) The computer-readable medium of claim 34, wherein the computer readable medium resides in a network, further comprising instructions for distributing solutions in the network.

55. (Previously Presented) The computer-readable medium of claim 34, wherein the computer readable medium resides in a network, further comprising instructions for creating heuristics related to the solution, wherein the heuristics are configured to be available within the network to evaluate proposed solutions.

56. (Previously Presented) The computer-readable medium of claim 34, wherein the event is associated with a security fault.

57. (Previously Presented) The computer-readable medium of claim 34, wherein the event is associated with a network operational fault.



58. (Original) A system for decision analysis and resolution, wherein an event is associated with a root cause, the system comprising:

means for relating a solution to the event based on the root cause;

means for determining whether the solution can resolve the event automatically;

means for automatically resolving the event when the event can be resolved automatically; and

means for providing information for resolving the event to a user when the event cannot be resolved automatically.

59. (Previously Presented) The system of claim 58, wherein the means for relating a solution to a root cause comprises means for utilizing a solutions catalog.

60. (Previously Presented) The system of claim 58, wherein the means for relating a solution to a root cause comprises means for chaining a series of solution objects to the root cause.

61. (Previously Presented) The system of claim 58, wherein the means for relating a solution to a root cause comprises means for interoperating with a trouble ticket system.

62. (Previously Presented) The system of claim 58, wherein the events are related to object oriented constructs, wherein the object oriented constructs comprise underlying intelligence, wherein the intelligence comprises relationships between the underlying object oriented constructs, and wherein the means for determining whether the solution can resolve the event automatically comprises means for utilizing the intelligence and the relationships to evaluate the validity of the solution.

63. (Original) The system of claim 62, wherein the validity of the solution is based upon previous success in resolving the event and descriptions of the related root cause.

64. (Cancelled).

65. (Previously Presented) The system of claim 58, wherein the means for determining whether the solution can resolve the event automatically comprises means for determining whether a root cause has a statistically significant correlation with a defined set of tasks leading to a resolution of the event.

66. (Previously Presented) The system of claim 58, wherein the means for determining whether the solution can resolve the event automatically comprises means for using object-oriented constructs.

67. (Previously Presented) The system of claim 58, wherein the means for determining whether the solution can resolve the event automatically comprises means for allowing a user to prevent automated resolution.

68. (Previously Presented) The system of claim 58, wherein the means for automatically resolving the event comprises means for providing information to a user by updating a trouble ticket.

69. (Previously Presented) The system of claim 58, wherein the means for providing information for resolving the event to a user comprises means for presenting the user with suggested corrective actions.

70. (Previously Presented) The system of claim 58, wherein the means for providing information for resolving the event to a user comprises means for evaluating the strength of relationships between a root cause constructs and a resolution construct.

71. (Previously Presented) The system of claim 58, wherein the means for providing information for resolving the event to a user comprises means for utilizing an object oriented model to define object constructs, wherein the constructs are then presented to the user.

72. (Previously Presented) The system of claim 58, wherein the means for providing information for resolving the event to a user comprises means for visualizing the information for resolving the event.

73. (Previously Presented) The system of claim 58, wherein the means for providing information for resolving the event to a user comprises means for visualizing the information for resolving the event, wherein the visualizing means comprises means for providing an overlay, and wherein the overlay offers information about the event.

74. (Previously Presented) The system of claim 58, wherein the means for providing information for resolving the event to a user comprises means for providing a searchable knowledge base.

75. (Previously Presented) The system of claim 58, wherein the means for providing information for resolving the event to a user comprises means for presenting a probability, wherein the probability is indicative of the success of the solution.

76. (Previously Presented) The system of claim 58, wherein the computer readable medium resides in a network, the system further comprising means for revising the network based on data generated while resolving the event.

77. (Previously Presented) The system of claim 52, wherein the means for revising the network comprises means for revising a datastore within the network based on the event resolution.

78. (Previously Presented) The system of claim 58, wherein the computer readable medium resides in a network, the system further comprising means for distributing solutions in the network.

79. (Previously Presented) The system of claim 58, wherein the computer readable medium resides in a network, the system further comprising means for creating heuristics related to the solution, wherein the heuristics are configured to be available within the network to evaluate proposed solutions.

80. (Original) The system of claim 58, wherein the event is associated with a security fault.

81. (Original) The system of claim 58, wherein the event is associated with a network operational fault.

82. (Previously Presented) A computer-implemented method for analyzing and resolving a fault within a computing system, comprising the steps of:

associating the fault with a root cause;

relating a solution to the fault based on the root cause;

automatically resolving the event, by the computing system, if the root cause has a statistically significant correlation with a set of tasks leading to the solution; and

providing information for resolving the event to a user if the root cause does not have a statistically significant correlation with any set of tasks leading to the solution.